

Work Order ID 137459

137459

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October 01, 2015 3:40:41 PM

Item ID: D500-572-011 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Bearpaw
 Start Date: 10/1/2015 Start Qty: 2.00 ***2*** Cust Item ID:
 Required Date: 10/29/2015 Req'd Qty: 2.00 ***2*** Customer:
 Reference:

Approvals: Process Plan: SW Date: 20151001 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2435	Rev E1								
IIND500-572	RevA								
100	Document Control	0.00	DAS	6					ML5 15-11-02
100	DOCUMENT CONTROL		9-89						(2)
DC	Memo	0.00							
Doc.Control -USB or Paperwork	Photocopy bluefile and create labels per PPP D500-572-011 CHG005								
160	Pick Kit	0.00							
160									
Packaging	Memo	0.00							
Packaging									

NOV 03 2015
 DAS 68-6 27 SVB
 NOV 02 2015
 DAS 28 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval 	
Description Work Order Deviation		Disposition			
				Completed By _____	
				Lead hand / Supervisor Approval Verification _____	
				QC / QA Coordinator Approval _____	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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Item ID: D500-572-011

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Bearpaw

Start Date: 10/1/2015 Start Qty: 2.00

2

Cust Item ID:

Required Date: 10/29/2015 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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170 QC4- 100% Inspect kits for completeness

0.00

170

QC

Memo

0.00

Quality Control

DAS
27
9-89

2X

NOV 03 2015

180

0.00

180

Packaging

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPPD500-572-011

LOCATION: FG012

FG013

DAS
28
9-89

2X

NOV 03 2015

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.00

Quality Control

ML5

NOV 03 2015

ML5 NOV 03 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :					
Misidentified ☐	Past Due ☐						

Picklist Print

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Work Order ID: 137459

137459

Parent Item: D500-572-011

D500-572-011

Parent Item Name: Bearpaw

Start Date: 10/1/2015

Required Date: 10/29/2015

Start Qty: 2.00

Required Qty: 2.00

Comments:

IPP Rev:C04.02.17Blank size changedKJ/JLM

IPP Rev:D 07-01-02 Was K10007 JLM

IPP Rev:E 08-01-09 Added Step 2 JLM Verified By:EC

IPP Rev:F 08-10-15 New Manufacturing Method JLM Verified By:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

QS200-M44S

Purchased

No

120

Each

22.0000

2

4

DAS

6
9-89

DAS
28
9-89

QS200-M44S
CLAMP

**

BAS
27
9-89

2X

Location

Loc Qty

Loc Code

ST545

22

m131340

22

AN4-15A

Purchased

No

170

Each

228.0000

8

16

DAS
6
9-89

DAS
28
9-89

AN4-15A
Bolt

**

133183

Location

Loc Qty

Loc Code

GA

40

120449

40

ST325A

100

m132551

0

m133284

100

ST343

88

m132551

88

D2182B

Manufactured

No

170

f

633.2603

1.666

3.332

**

D2182B

Rubber Cushion - Black (\$Per Foot)

BAS
27
9-89

2X

Location

Loc Qty

Loc Code

ST41A

633.2603

130427

283.2603

135093

350

(D2182B050) cut 4 at 5.00" 9-89

BAS
27
9-89

2X

DAS
6
9-89
NOV 02 2015

DAS
28
9-89

Picklist Print

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Work Order ID: 137459

137459

Parent Item: D500-572-011

D500-572-011

Parent Item Name: Bearpaw

Start Date: 10/1/2015

Required Date: 10/29/2015

Start Qty: 2.00

Required Qty: 2.00

NAS1149D0463J

Purchased

No

170

Each

4,495.000

8

16

NAS1149D0463.J

WASHER

DAS
6
9-89

NOV 9 1 2014

DAS
28
9-89

DAS
27
9-89

28

Location

Loc Qty

Loc Code

GA

41

M129390

41

ST260a

2000

M133284

2000

ST269

2454

M129682

86

M130799

371

M132317

125

M132677

888

M133077

984



RELEASED
98.06.17 KE

DESIGN	DRAWN BY	DART AEROSPACE LTD
98.05.19	98.01.24	NEW ISSUE
98.03.26	97.05.07	CHANGE BORE AND C'BORE DEPTH
97.10.17	R1.5 BORE WAS R2.637 (TSR A469)	CHANNEL & C'BORE DEPTH CHANGED
98.05.19	CHANGE C'BORE, R1.58 WAS R1.50	CHANGE C'BORE, R1.58 WAS R1.50

98.05.19	98.01.24	97.05.07	97.10.17	98.05.19
98.05.19	98.01.24	97.05.07	97.10.17	98.05.19

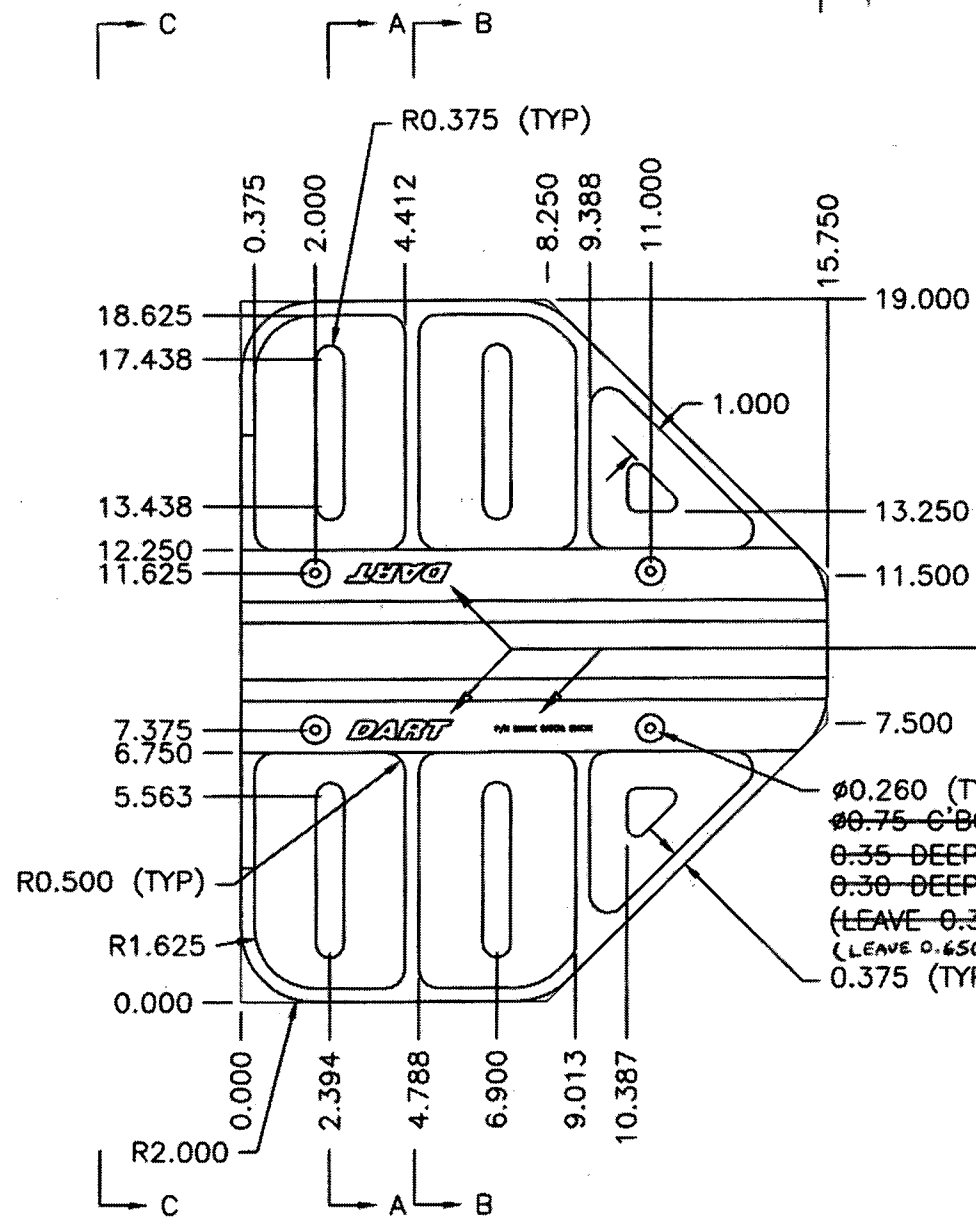
20151001

SH
137459

9143

ENGRAVE LOGO TO MAX DEPTH OF 0.012. ENGRAVE PART AND BATCH NUMBERS TO MAX DEPTH OF 0.010. (TYPICAL LOCATION AS ILLUSTRATED)

E1 02.12.17 $\phi 0.93$ WAS $\phi 0.75$ REA



$\phi 0.260$ (TYP) $\phi 0.93$ C'BORE
 ~~$\phi 0.75$ C'BORE~~ 0.30 DEEP FROM BOTTOM
0.35 DEEP FROM TOP (MIN.)
0.30 DEEP FROM BOTTOM.
(LEAVE 0.300 MIN.)
(LEAVE 0.650 MIN.)
0.375 (TYP)

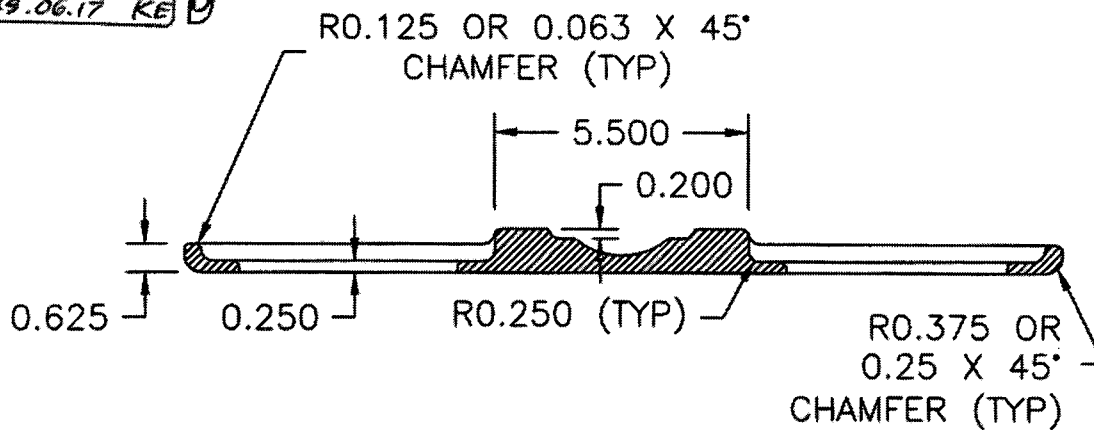
MATERIAL: UHMW BLACK PER SPEC CONTROL DRAWING D2689
1.00 THICK (MACHINE TO 0.950)



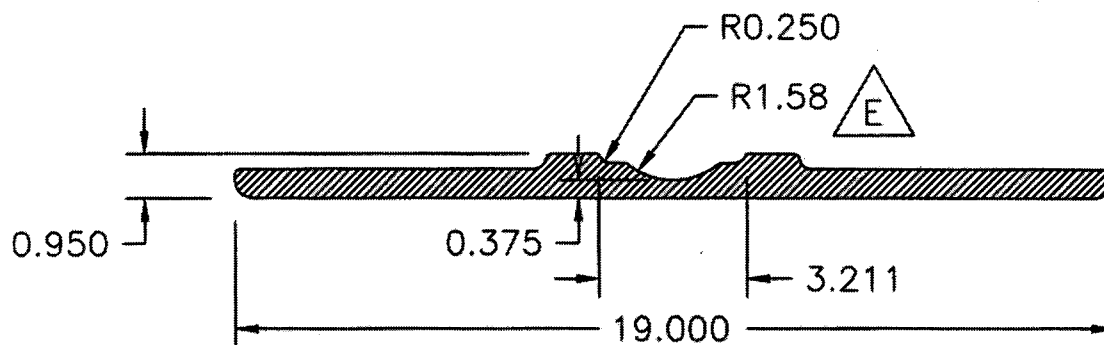
DESIGN <i>KE</i>	DRAWN BY <i>KE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>DP</i>	APPROVED <i>KE</i>	DRAWING NO. D2435	REV. E SHEET 2 OF 2
DATE 98.05.19		TITLE BEARPAW	SCALE 1:4

20151001

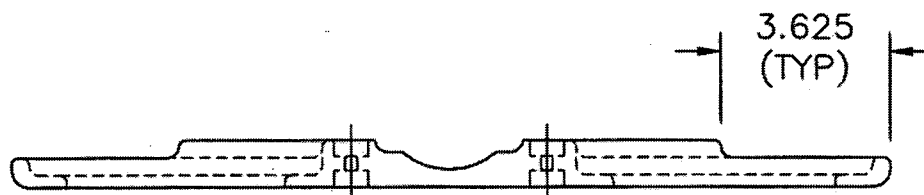
RELEASED
99.06.17 KE



SECTION A-A



SECTION B-B



SECTION C-C

*Reference
only***4. WEIGHT AND BALANCE**

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D500-572-011 Bearpaw Installation	8.5 lb 3.86 kg	0.0 in 0.0 m	0.0 lb-kG 0.0 m-kG	130 in 3.30 m	1105 in-lb 12.74 m-kG
D500-572-021 Narrow Bearpaw Installation	7.5 lb 3.41 kg	0.0 in 0.0 m	0.0 lb-kG 0.0 m-kG	130 in 3.30 m	975 in-lb 11.25 m-kG
D500-572-013 Bearpaw Installation	11.4 lb 5.17 kg	0.0 in 0.0 m	0.0 lb-kG 0.0 m-kG	128 in 3.25 m	1459 in-lb 16.80 m-kG
D600-572-015 Bearpaw Installation	11.4 lb 5.17 kg	0.0 in 0.0 m	0.0 lb-kG 0.0 m-kG	122 in 3.10 m	1391 in-lb 16.03 m-kG

5. PARTS LIST

Qty D500 -572 -011	Qty D500 -572 -021	Qty D500 -572 -013	Qty D600 -572 -015	Part Number	Description
X				D500-572-011	BEARPAW INSTALLATION
	X			D500-572-021	NARROW BEARPAW INSTALLATION
		X		D500-572-013	BEARPAW INSTALLATION
			X	D600-572-015	BEARPAW INSTALLATION
2				D2435	BEARPAW
	2			D2671	BEARPAW
		2		D2995	BEARPAW
			2	D2996	BEARPAW
4	4	4		D2182B050	RUBBER CUSHION
			4	D2182B060	RUBBER CUSHION
8	8	8	8	D2274	RADIUS BLOCK
4	4	4		D2438	CLAMP
			4	D2519	CLAMP
8	8	8	8	D2529	WASHER
		8	8	AN4-13A	BOLT
8	8			AN4-15A	BOLT
8	8	8	8	AN960JD416	WASHER
8	8	8	8	MS21042L4	NUT (OR MS21042-4)
2	2			QS200M44S	CLAMP
			4	QS100M24S	CLAMP

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Revision: **A**

Date: 01.02.21